

## **Appendix A**

# **International Cosmetic Ingredient Dictionary and Handbook**

**Eleventh Edition  
2006**

**Volume 2**

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**INCI Name Monographs I-S**

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# **International Cosmetic Ingredient Dictionary and Handbook**

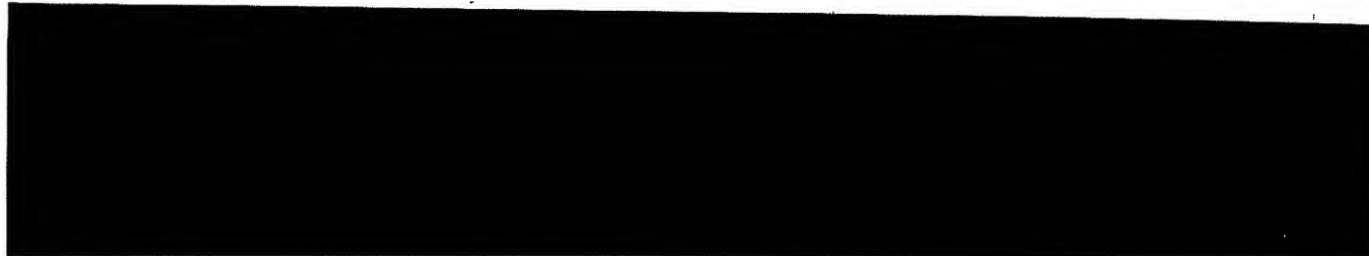
**Eleventh Edition  
2006**

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## **Volume 2**

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## PEG-55

Macrogol 1000 (NOF)  
Pluracol E 1000 (BASF)  
Polyglykol 1000 (Clariant)  
Polyglykol 1000 (Clariant GmbH, Personal Care)  
Renex PEG 1000 (Uniqema Americas)  
Sabopeg 1000 (Sabo)  
Toho PEG#1000 (Toho)  
Unipeg-1000 X (Universal Preserv-A-Chem)  
Uplwax 1000 (Universal Preserv-A-Chem)

**Trade Name Mixtures:**

Silwax WS (Siltech LLC)  
Suncaps 664 (Particle Sciences)  
Suncaps 903 (Particle Sciences)

**PEG-32****CTFA Monograph ID:** 1955**CAS No.:** 25322-68-3 (Generic)**JPN Translation:**

PEG - 32

**CN Translation:**

聚乙二醇-32

**Definition:** PEG-32 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 32.

**Information Sources:** BAN, BP, BPC, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CIR: [SQ] JACT-12(5)-1993, CTFA S, CZE, FCC, HUN, INN, JAN, JCIC, JCLS, JSQI, MAR, MI-13(7651), NF XVIII, TSCA, USAN, USD

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Humectant; Solvent**Ingredient Source:** Synthetic

**Reported Product Categories:** Bath Oils, Tablets, and Salts; Moisturizing Preparations; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Bath Capsules; Skin Care Preparations, Misc.; Dentifrices (Aerosol, Liquid, Pastes and Powders); Bath Preparations, Misc.; Body and Hand Preparations (Excluding Shaving Preparations); Face and Neck Preparations (Excluding Shaving Preparations); Paste Masks (Mud Packs); Mascara

**Technical/Other Names:**

macrogol (INN)  
Polyethylene Glycol 1540  
Polyoxyethylene (32)

**Trade Names:**

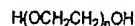
Carbowax PEG 1450 (Dow Chemical)  
Jeschem 1450 NF (Jellco Co. LTD)  
Lipo Polyglycol 1500 (Lipo)  
Lipo Polyglycol 3350 (Lipo)  
Lipoxol 1500 MED (Sasol GmbH - Marl)  
Lumulse PEG 1450 (Lambent)  
Macrogol 1500 (NOF)  
Macrogol 1540 (NOF)  
Pluracare E 1500 (BASF)  
Pluracol E 1450 (BASF)  
Polyglycol E1450 (Dow Chemical)  
Polyglykol 1500 (Clariant)  
Polyglykol 1500 (Clariant GmbH, Personal Care)  
Protachem 1450 NF (Protameen)  
Renex PEG 1500 (Uniqema Americas)  
Sabopeg 1500 (Sabo)  
Sympatens-PEG/1500 G (Kolb)  
Toho PEG#1540 (Toho)  
Unipeg-1540 X (Universal Preserv-A-Chem)

**Trade Name Mixtures:**

Carbowax PEG 540 Blend (Dow Chemical)  
Lanogen 1500 (Clariant)  
Lanogen 1500 (Clariant GmbH, Personal Care)  
Swertianin-P (Ichimaru Pharcos)  
Unipeg-1500 X (Universal Preserv-A-Chem)  
Unlwx 1450 (Universal Preserv-A-Chem)

**PEG-33****CTFA Monograph ID:** 17410

**Definition:** PEG-33 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 33.

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Humectant; Solvent**Ingredient Source:** Synthetic**Technical/Other Names:**

Polyethylene Glycol (33)  
Polyoxyethylene (33)

**Trade Name Mixtures:**

SilSense Copolyol-1 Silicone (Noveon)  
SilSense Copolyol-7 Silicone (Noveon)

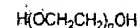
**PEG-40****CTFA Monograph ID:** 1956**CAS No.:** 25322-68-3 (Generic)**JPN Translation:**

PEG - 40

**CN Translation:**

聚乙二醇-40

**Definition:** PEG-40 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 40.

**Information Sources:** BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.200, 21CFR178.3750, 21CFR178.3910, INN, JAN, JCIC, JCLS, MI-13(7651), NF XVIII, ROM, TSCA, USAN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Humectant; Solvent**Ingredient Source:** Synthetic**Technical/Other Names:**

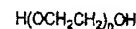
macrogol (INN)  
Polyethylene Glycol (2000)  
Polyoxyethylene (40)

**Trade Names:**

Pluracol E 2000 (BASF)  
Polyglykol 2000 (Clariant)  
Polyglykol 2000 (Clariant GmbH, Personal Care)

**PEG-45****CTFA Monograph ID:** 11904**CAS No.:** 25322-68-3 (Generic)

**Definition:** PEG-45 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 45.

**Information Source:** INN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Humectant; Solvent**Ingredient Source:** Synthetic**Technical/Other Names:**

macrogol (INN)  
Polyethylene Glycol (45)  
Polyoxyethylene (45)

**Trade Name:**

Toho PEG#2000 (Toho)

**PEG-55****CTFA Monograph ID:** 7532

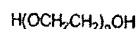
The inclusion of any compound in the *Dictionary and Handbook* does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

## PEG-55 (Cont.)

CAS No.: 25322-68-3 (Generic)

CN Translation:  
聚乙二醇-55

Definition: PEG-55 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 55.

Information Sources: BAN, INN, JAN, NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Ingredient Source: Synthetic

Technical/Other Names:

macrogol (INN)  
Polyethylene Glycol (55)  
Polyoxyethylene (55)

Trade Names:

Jeechem 3350 NF (Jellice Co. LTD)  
Renex PEG 3350 (Uniqema Americas)

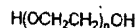
## PEG-60

CTFA Monograph ID: 5425

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 60CN Translation:  
聚乙二醇-60

Definition: PEG-60 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 60.

Information Sources: BAN, INN, JAN, MI-13(7651), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Ingredient Source: Synthetic

Technical/Other Names:

macrogol (INN)  
Polyethylene Glycol 3000  
Polyoxyethylene (60)

Trade Names:

Polyglykol 3000 (Clarant)  
Polyglykol 3000 (Clarant GmbH, Personal Care)

## PEG-75

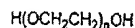
CTFA Monograph ID: 1957

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CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 75

Definition: PEG-75 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 75.

Information Sources: BAN, BP, BPC, BRA, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CIR: [SQ] JACT-12(5)-1993, CTFA S, FCC, HUN, INN, JAN, JCLS, JSCI, MAR, MI-13(7651), NF XVIII, NFJ, PN, POL, ROM, TSCA, USAN, USD

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Ingredient Source: Synthetic

Reported Product Categories: Skin Care Preparations, Misc.; Paste Masks (Mud Packs); Bath Oils, Tablets, and Salts; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Moisturizing Preparations

Technical/Other Names:

macrogol (INN)  
Polyethylene Glycol 4000  
Polyoxyethylene (75)

Trade Names:

Carbowax PEG 3350 (Dow Chemical)  
Lipoxol 3350 MED (Sasol GmbH - Marl)  
Lumulse PEG 3350 (Lambert)  
Pluracare E 3400 (BASF)  
Pluracol E 4000 (BASF)  
Polyglykol 3350 (Clarant)  
Polyglykol 3350 (Clarant GmbH, Personal Care)  
Protachem 75 (Protameen)  
Renex PEG 4000 (Uniqema Americas)  
Sabopog 4000 (Sabo)  
Sympatens-PEG/4000 G (Kolb)  
Uptwax 3350 (Universal Preserv-A-Chem)

Trade Name Mixture:

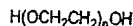
Suncaps C (Particle Sciences)

## PEG-80

CTFA Monograph ID: 18469

CAS No.: 25322-68-3 (Generic)

Definition: PEG-80 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 80.

Information Source: INN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Ingredient Source: Synthetic

Technical/Other Names:

macrogol (INN)  
Polyethylene Glycol (80)  
Polyethylene Glycol 4000  
Polyoxyethylene (80)

Trade Name:

Protachem 400 (Protameen)

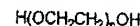
## PEG-90

CTFA Monograph ID: 6966

CAS No.: 25322-68-3

JPN Translation:  
PEG - 90CN Translation:  
聚乙二醇-90

Definition: PEG-90 is the polymer of ethylene oxide that conforms to the formula:



where n has an average value of 90.

Information Sources: BAN, INN, JAN, NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Ingredient Source: Synthetic

Technical/Other Names:

macrogol (INN)  
Polyethylene Glycol (90)  
Polyoxyethylene (90)

Trade Names:

Lipoxol 4000 MED (Sasol GmbH - Marl)  
Macrogol 4000 (NOF)  
Pluracare E 4000 (BASF)  
Polyglycol E-4000 (Dow Chemical)  
Polyglykol 4000 (Clarant)  
Polyglykol 4000 (Clarant GmbH, Personal Care)  
Toho PEG #4000 (Toho)  
Unipeg-4000 X (Universal Preserv-A-Chem)

## PEG-100

CTFA Monograph ID: 4098

CAS No.: 25322-68-3 (Generic)

**PEG-2 Laurate SE (Cont.)**

**Definition:** PEG-2 Laurate SE is a self-emulsifying grade of PEG-2 Laurate (q.v.) that contains some sodium and/or potassium laurate.

**Information Sources:** CIR: [SQ] IJT-19 (SUPPL. 2)2000, JCLS

**Chemical Class:** Alkoxylated Carboxylic Acids

**Function:** Surfactant - Emulsifying Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Names:**

Diethylene Glycol Monolaurate Self-Emulsifying  
Polyethylene Glycol 100 Monolaurate Self-Emulsifying  
Polyoxyethylene (2) Monolaurate Self-Emulsifying

**Trade Name:**

Lipo DGLS (Lipo)

**Trade Name Mixture:**

Pegosperse 100 L (Lonza Inc./Lonza Ltd.)

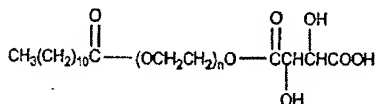
**PEG-6 LAURATE/TARTRATE**

**CTFA Monograph ID:** 5910

**CN Translation:**

PEG-6 月桂酸酯/酒石酸酯

**Definition:** PEG-6 Laurate/Tartrate is the mixed ester of PEG-6 and lauric and tartaric acids that conforms generally to the formula:



where n has an average value of 6.

**Chemical Class:** Alkoxylated Carboxylic Acids

**Function:** Surfactant - Emulsifying Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Name:**

PEG-6 Laurate/Tartrate

**Trade Name:**

Hydrophore 312 (Prod'Hyg)

**PEG-180/LAURETH-50/TMMG COPOLYMER**

**CTFA Monograph ID:** 12111

**Definition:** PEG-180/Laureth-50/TMMG Copolymer is a copolymer of PEG-180 (q.v.), a polyethylene glycol ether of lauryl alcohol with an average ethoxylation value of 50, and tetramethoxymethylglycouril monomers.

**Chemical Class:** Synthetic Polymers

**Function:** Viscosity Increasing Agent - Aqueous

**Ingredient Sources:** Plant; Synthetic

**Trade Name:**

Pure Thix 1450 (Sud-Chemie, Performance Additives)

**PEG-10/LAURYL DIMETHICONE CROSS-POLYMER**

**CTFA Monograph ID:** 16203

**JPN Translation:**

(PEG-10 / ラウリルジメチコン) クロスポリマー

**Definition:** PEG-10/Lauryl Dimethicone Crosspolymer is a copolymer of Lauryl Dimethicone (q.v.) crosslinked with diallyl PEG-10.

**Chemical Classes:** Siloxanes and Silanes; Synthetic Polymers

**Functions:** Surfactant - Suspending Agent; Viscosity Increasing Agent - Aqueous

**Ingredient Sources:** Plant; Synthetic

**Trade Name Mixtures:**

KSG-34 (Shin-Etsu Chemical Co.)  
KSG-340 (Shin-Etsu Chemical Co.)

**PEG-15/LAURYL DIMETHICONE CROSS-POLYMER**

**CTFA Monograph ID:** 16204

**JPN Translation:**

(PEG-15 / ラウリルジメチコン) クロスポリマー

**Definition:** PEG-15/Lauryl Dimethicone Crosspolymer is a copolymer of Lauryl Dimethicone (q.v.) crosslinked with diallyl PEG-15.

**Chemical Classes:** Siloxanes and Silanes; Synthetic Polymers

**Function:** Viscosity Increasing Agent - Aqueous

**Ingredient Sources:** Plant; Synthetic

**Trade Name Mixtures:**

KSG-31 (Shin-Etsu Chemical Co.)  
KSG-32 (Shin-Etsu Chemical Co.)  
KSG-33 (Shin-Etsu Chemical Co.)  
KSG-34 (Shin-Etsu Chemical Co.)  
KSG-310 (Shin-Etsu Chemical Co.)  
KSG-320 (Shin-Etsu Chemical Co.)  
KSG-330 (Shin-Etsu Chemical Co.)  
KSG-340 (Shin-Etsu Chemical Co.)

**PEG-8 LINOLEATE**

**CTFA Monograph ID:** 5452

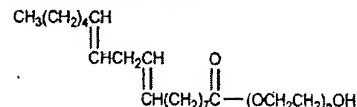
**CN Translation:**

PEG-8 亞油酸酯

**Empirical Formula:**

C<sub>34</sub>H<sub>64</sub>O<sub>10</sub>

**Definition:** PEG-8 Linoleate is the polyethylene glycol ester of linoleic acid that conforms to the formula:



where n has an average value of 8.

**Information Source:** MI-13(7660)

**Chemical Class:** Alkoxylated Carboxylic Acids

**Function:** Surfactant - Emulsifying Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Names:**

Polyethylene Glycol 400 Linoleate  
Polyoxyethylene (8) Linoleate

**Trade Name Mixture:**

Efevit S (Fabriquimica)

**PEG-8 LINOLENATE**

**CTFA Monograph ID:** 5453

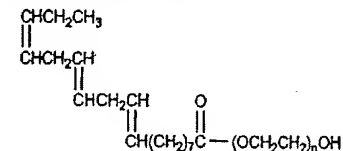
**CN Translation:**

PEG-8 亞麻酸酯

**Empirical Formula:**

C<sub>34</sub>H<sub>62</sub>O<sub>10</sub>

**Definition:** PEG-8 Linolenate is polyethylene glycol ester of linolenic acid that conforms to the formula:



where n has an average value of 8.

**Information Source:** MI-13(7660)

**Chemical Class:** Alkoxylated Carboxylic Acids

**Function:** Surfactant - Emulsifying Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Names:**

Polyethylene Glycol 400 Linolenate  
Polyoxyethylene (8) Linolenate

**Trade Name Mixture:**

Efevit S (Fabriquimica)

**PEG-2M**

**CTFA Monograph ID:** 1961

The inclusion of any compound in the Dictionary and Handbook does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

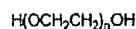


## PEG-14M

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 2 MCN Translation:  
聚乙二醇-2M

Definition: PEG-2M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 2000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxyated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Ingredient Source: Synthetic

Reported Product Category: Hair Conditioners

Technical/Other Names:

macrogol (INN)  
PEG-2000  
Polyethylene Glycol (2000)  
Polyoxyethylene (2000)

Trade Name:

Polyox WSR N-10 (Amerchol)

Trade Name Mixture:

Spectravell AQ (Uniqema Europe)

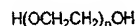
## PEG-5M

CTFA Monograph ID: 1962

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 5 MCN Translation:  
聚乙二醇-5M

Definition: PEG-5M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 5000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxyated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Ingredient Source: Synthetic

Reported Product Categories: Shampoos (Non-coloring); Hair Conditioners

Technical/Other Names:

macrogol (INN)  
PEG-5000  
Polyethylene Glycol (5000)  
Polyoxyethylene (5000)

Trade Names:

Polyox WSR N-80 (Amerchol)  
Rita PEO-1 (Rita)

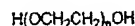
## PEG-7M

CTFA Monograph ID: 1963

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 7 MCN Translation:  
聚乙二醇-7M

Definition: PEG-7M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 7000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxyated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Ingredient Source: Synthetic

Reported Product Category: Shampoos (Non-coloring)

Technical/Other Names:

macrogol (INN)  
PEG-7000  
Polyethylene Glycol (7000)  
Polyoxyethylene (7000)

Trade Name:

Polyox WSR N-750 (Amerchol)

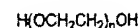
## PEG-9M

CTFA Monograph ID: 3708

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 9 MCN Translation:  
聚乙二醇-9M

Definition: PEG-9M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 9000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, USAN

Chemical Classes: Alkoxyated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Ingredient Source: Synthetic

Technical/Other Names:

macrogol (INN)  
PEG-9000  
Polyethylene Glycol 9000  
Polyoxyethylene (9000)

Trade Names:

Alkox E-30G (Melsei)  
Rita PEO-2 (Rita)

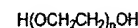
## PEG-14M

CTFA Monograph ID: 1964

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG - 14 MCN Translation:  
聚乙二醇-14M

Definition: PEG-14M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 14000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, CIR: [SQ] JACT-12(5)-1993, INN, JSQI, MI-13(7651), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxyated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Ingredient Source: Synthetic

Reported Product Categories: Shampoos (Non-coloring); Shaving Preparations, Misc.; Shaving Cream (Aerosol, Brushless and Lather); Bath Oils, Tablets, and Salts; Bath Soaps and Detergents; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads)

The inclusion of any compound in the *Dictionary and Handbook* does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

## PEG-14M (Cont.)

**Technical/Other Names:**

macrogol (INN)  
PEG-14000  
Polyethylene Glycol (14000)  
Polyoxyethylene (14000)

**Trade Names:**

Polyox WSR-205 (Amerchol)  
Polyox WSR N-3000 (Amerchol)

## PEG-20M

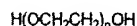
CTFA Monograph ID: 1965

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG-20M

CN Translation:  
聚乙二醇-20M

**Definition:** PEG-20M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 20000.

**Information Sources:** 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, CIR: [SQ] JACT-12(5)-1993, EP, INN, JSQI, MI-13(7651), NF XIX, TSCA, USAN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
Macrogolum 20000 (EP)  
PEG-20000  
Polyethylene Glycol 20000  
Polyoxyethylene (20000)

**Trade Name Mixture:**

Vegeles SR (Laboratoires Serobiologiques)

## PEG-23M

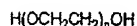
CTFA Monograph ID: 3709

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG-23M

CN Translation:  
聚乙二醇-23M

**Definition:** PEG-23M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 23000.

**Information Sources:** 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, USAN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
PEG-23000  
Polyethylene Glycol (23000)  
Polyoxyethylene (23000)

**Trade Names:**

Polyox WSR N-12K (Amerchol)  
Rita PEO-3 (Rita)

## PEG-25M

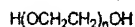
CTFA Monograph ID: 6480

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG-25M

CN Translation:  
聚乙二醇-25M

**Definition:** PEG-25M is the polymer of ethylene oxide that conforms generally to the formula:



where n has a value of 25000.

**Information Sources:** INN, JSQI

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
PEG-25000  
Polyethylene Glycol (25000)  
Polyoxyethylene (25000)

## PEG-45M

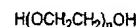
CTFA Monograph ID: 3710

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG-45M

CN Translation:  
聚乙二醇-45M

**Definition:** PEG-45M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 45000.

**Information Sources:** 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, USAN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Reported Product Category:** Shampoos (Non-coloring)

**Technical/Other Names:**

macrogol (INN)  
PEG-45000  
Polyethylene Glycol (45000)  
Polyoxyethylene (45000)

**Trade Name:**

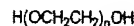
Polyox WSR N-60K (Amerchol)

## PEG-65M

CTFA Monograph ID: 15211

CAS No.: 25322-68-3 (Generic)

**Definition:** PEG-65M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 65000.

**Information Source:** INN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
Polyethylene Glycol (65000)  
Polyoxyethylene (65000)

**Trade Name:**

Alkox E-100 (Melsel)

## PEG-90M

CTFA Monograph ID: 1968

CAS No.: 25322-68-3 (Generic)

JPN Translation:  
PEG-90M

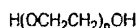
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## PEG-20 Mannitan Laurate

## CN Translation:

聚乙二醇-90M

**Definition:** PEG-90M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 90000.

**Information Sources:** 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651), NF XVIII, TSCA, USAN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
PEG-90000  
Polyethylene Glycol (90000)  
Polyoxyethylene (90000)

**Trade Names:**

Polyox WSR-301 (Amerchol)  
Rita PEO-18 (Rita)

## PEG-160M

CTFA Monograph ID: 7730

CAS No.: 25322-68-3 (Generic)

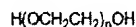
## JPN Translation:

PEG - 160 M

## CN Translation:

聚乙二醇-160M

**Definition:** PEG-160M is a polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 160000.

**Information Source:** INN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
Polyethylene Glycol (160000)  
Polyoxyethylene (160000)

**Trade Name:**

Rita PEO-27 (Rita)

**Definition:** PEG-16 Macadamia Glycerides is the polyethylene glycol derivative of the mono- and diglycerides derived from macadamia nut oil with an average of 16 moles of ethylene oxide.

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Names:**

Polyethylene Glycol (16) Macadamia Glycerides  
Polyoxyethylene (16) Macadamia Glycerides

**Trade Name:**

Florasolv PEG-16 Macadamia (Floritech)

**Trade Name Mixtures:**

EiXtractives B (Essential Ingredients)  
EiXtractives CS (Essential Ingredients)  
EiXtractives DS (Essential Ingredients)  
EiXtractives EC (Essential Ingredients)  
EiXtractives HL (Essential Ingredients)  
EiXtractives OS (Essential Ingredients)  
VitaCon ABCM (Essential Ingredients)  
VitaCon ACEM (Essential Ingredients)  
VitaCon ADEM (Essential Ingredients)  
VitaCon AEKM (Essential Ingredients)  
VitaCon AEM (Essential Ingredients)  
VitaCon AM (Essential Ingredients)

## PEG-115M

CTFA Monograph ID: 3711

CAS No.: 25322-68-3 (Generic)

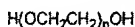
## JPN Translation:

PEG - 115 M

## CN Translation:

聚乙二醇-115M

**Definition:** PEG-115M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 115000.

**Information Sources:** 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, INN, JSQI, MI-13(7651)

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
PEG-115000  
Polyethylene Glycol (115000)  
Polyoxyethylene (115000)

**Trade Name:**

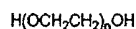
Alkox E-240 (Meisel)

## PEG-180M

CTFA Monograph ID: 18747

CAS No.: 25322-68-3 (Generic)

**Definition:** PEG-180M is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 180,000.

**Information Source:** INN

**Chemical Classes:** Alkoxyated Alcohols; Polymeric Ethers

**Functions:** Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

**Ingredient Source:** Synthetic

**Technical/Other Names:**

macrogol (INN)  
Polyethylene Glycol 118000

**Trade Name:**

Polyox WSR-308 (Amerchol)

## PEG-70 MANGO GLYCERIDES

CTFA Monograph ID: 6687

## CN Translation:

PEG-70 芒果甘油酯类

**Definition:** PEG-70 Mango Glycerides is a polyethylene glycol derivative of the mono- and diglycerides from mango seed oil containing an average of 70 moles of ethylene oxide.

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Skin-Conditioning Agent - Emollient; Surfactant - Cleansing Agent; Surfactant - Solubilizing Agent

**Ingredient Sources:** Plant; Synthetic

**Technical/Other Names:**

Polyethylene Glycol (70) Mango Glycerides  
Polyoxyethylene (70) Mango Glycerides

**Trade Name:**

Lipex 203 E-70 (Karlshamns AB)

## PEG-16 MACADAMIA GLYCERIDES

CTFA Monograph ID: 12413

## JPN Translation:

PEG - 16 マカデミアグリセリズ

## PEG-20 MANNITAN LAURATE

CTFA Monograph ID: 7402

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## **Appendix B**

S

**ethylene glycol dimethacrylate), tetramethacrylate end-capped**

methacrylate end-capped  
lucensulfonate dopant  
0.01-0.5 S/cm (bulk conductivity)

**dispersion in propylene carbonate), contains p-fonate as dopant**  
6,000 (lit.)

1.189 g/mL, 25 °C  
132 °C (270 °F) Moisture sensitive

glass btl 25 g 85.80

**(dispersion in nitromethane), contains p-fonate as dopant**

pin c applications  
6,000

1.127 g/mL, 25 °C  
5.41 Fp 36 °C (97 °F)

glass btl 25 g 85.80

**ne-co-ethyl acrylate)**

$(CH_2CH_2)_x(CH_2CH(CO_2C_2H_5))_y$   
0.93 g/mL, 25 °C

**nyl acrylate: 18 wt. %, melt index 20**

viscosity 0.78 dU/g(lit.)

116 °C

glass btl 500 g 49.10

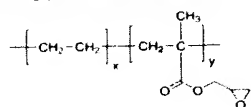
**nyl acrylate: 18 wt. %, melt index 6**

viscosity 0.81 dU/g(lit.)

152 °C

glass btl 500 g 55.20

**ne-co-glycidyl methacrylate)**



87 °C (Vicat, ASTM D 1525-1kg)  
99 °C density 0.94 g/mL, 25 °C

**t index (190°C/2.16kg) 5 g/10 min**  
idyl functionality available for grafting or cross-

le coatings and adhesion promoter  
ore A, ASTM D 2240) 92

thacrylate 8 wt. %  
38 S 26-36 TSCA

glass btl 250 g 23.90  
glass btl 1 kg 49.50

S

**Poly(ethylene glycol)**

Form	Mol. Wt.	M.P. (°C)	Viscosity at 210 °F (cSt)	Prod. No.	Price
liquid	average mol wt 200	-65	4.3	P3015-5G P3015-250G P3015-500G P3015-1KG P3015-20KG	9.00 12.90 21.50 33.20 531.00
viscous liquid	average M <sub>n</sub> 285-315	-15-8	5.8	202371-5G 202371-250G 202371-500G 202371-1KG 202371-20KG	19.10 21.50 23.80 36.50 433.50
viscous liquid	average M <sub>n</sub> 380-420	4-8	7.3	202398-5G 202398-250G 202398-500G 202398-20KG	19.10 23.40 43.30 432.50
waxy solid (moist)	average M <sub>n</sub> 570-630	20-25	10.5	202401-5G 202401-250G 202401-500G 202401-20KG	19.10 26.00 26.30 433.50
waxy solid	average M <sub>n</sub> 850-950	32-36	16	372994	Inquire
waxy solid	average M <sub>n</sub> 950-1,050	39	17.4	P3515-5G P3515-250G P3515-500G P3515-1KG	13.10 18.00 21.60 32.40
waxy solid	average M <sub>n</sub> 1,305-1,595	43-46	28	202436-5G 202436-250G 202436-500G 202436-20KG	15.50 22.80 30.60 382.00
chips	average M <sub>n</sub> 1,900-2,200	52-54	-	295906-5G 295906-250G 295906-500G	20.10 24.20 31.10
powder	average M <sub>n</sub> 3,015-3,685	54-58	90	202444-5G 202444-250G 202444-500G	21.60 29.00 33.60
flakes	average M <sub>n</sub> 4,400-4,800	57-61	180	373001-10G 373001-250G 373001-1KG	21.30 24.80 55.00
powder (crystalline)	average M <sub>n</sub> 7,000-9,000	60-63	800	202452-5G 202452-250G 202452-500G	18.10 27.40 32.00
flakes	average M <sub>n</sub> 8,500-11,500	63-65	-	309028-5G 309028-250G 309028-500G	18.70 22.10 26.10
waxy solid	average M <sub>n</sub> 14,000	62-67	-	637726-100G 637726-1KG	24.50 136.00

**Poly(ethylene glycol) acrylate**

[9051-31-4] H<sub>2</sub>C=CHCO(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>OH

density 1.12 g/mL, 25 °C n<sub>D</sub><sup>20</sup> 1.466

average M<sub>n</sub> ~375

viscosity 42 cSt (25 °C)(lit.)

contains 1,000-1,500 ppm MEHQ as inhibitor

✗ R 36/37/38 S 26-36 Fp 113 °C (235 °F)

469823-100ML glass btl 100 mL 31.30

469823-500ML glass btl 500 mL 103.50

**Poly(ethylene glycol) behenyl ether methacrylate solution**

[125441-87-4] H<sub>2</sub>C=C(CH<sub>3</sub>)CO<sub>2</sub>(CH<sub>2</sub>CH<sub>2</sub>O)<sub>n</sub>(CH<sub>2</sub>)<sub>21</sub>CH<sub>3</sub>

average M<sub>n</sub> ~1,500, 50 wt. % in methacrylic acid/water

Copolymerizable surfactant and associative thickener in acrylic latexes.

viscosity 300 cP (25 °C)(lit.)

contains 1000 ppm MEHQ as stabilizer, 25% water

bp 95 °C n<sub>D</sub><sup>20</sup> 1.431

density 1.06 g/mL, 25 °C pH 3-4

R 20/21/22-34-43 S 26-27-36/37/39-45 Fp 113 °C (235 °F)  
TSCA

468258-100ML glass btl 100 mL 29.50

468258-250ML glass btl 250 mL 60.20

**Poly(ethylene glycol) bis(3-aminopropyl) terminated**

O,O'-Bis(3-aminopropyl)polyethylene glycol 1,500

[34901-14-9] (C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>C<sub>6</sub>H<sub>16</sub>N<sub>2</sub>O

mp 49 °C

S 22-24/25 TSCA

452572-1G glass btl 1 g 26.60

452572-5G glass btl 5 g 87.50

**Poly(ethylene glycol) bis(carboxymethyl) ether**

Polyethylene glycol 600 diacid, Polyglycol 600 diacid

[39927-08-7] HOOCCH<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>OCH<sub>2</sub>COOH

R 34 S 26-36/37/39-45 Fp 113 °C (235 °F)

▶ average M<sub>n</sub> ~250

density 1.302 g/mL, 25 °C n<sub>D</sub><sup>20</sup> 1.454

406996-100G glass btl 100 g 73.90